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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,351	10/24/2003	Mark Vincent	UDLZ 2 00022-2	2709
27885	7590	09/19/2005	EXAMINER	
FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP 1100 SUPERIOR AVENUE, SEVENTH FLOOR CLEVELAND, OH 44114			LIN, ING HOUR	
			ART UNIT	PAPER NUMBER

1725

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/693,351	VINCENT ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ing-Hour Lin	1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 10/048,695.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)          |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/03, 01, 5, 9/04</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

*Hi*

### DETAILED ACTION

1. In view of the interview held on September 8, 2005, the first set of claims (claims 1-24) is canceled and the preliminary claims 18-41 are examined in this office action. However, the numbering of the preliminary claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not). In response of this office action, applicant is required to renumber the claims 18-41 thus canceling claims 1-41 and presenting new claims beginning from claim 42.

### *Specification*

2. The specification is objected to because there is a lack of section headings:

CROSS-REFERENCE TO RELATED APPLICATIONS;  
BACKGROUND OF THE INVENTION  
BRIEF SUMMARY OF THE INVENTION; BRIEF DESCRIPTION OF THE  
SEVERAL VIEWS OF THE DRAWING(S); and  
DETAILED DESCRIPTION OF THE INVENTION.

Correction is required

3. The specification is objected to because it is believed that the present application should instead be a continuation of 10/048,695, rather than a divisional. Application No. 10/048,695 was not subject to a restriction requirement (all original claims were examined). In addition, claims in the present application are subject to double patenting rejections with 10/048,695.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 18, 34 and 38 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 10, 21-22 and 27 of copending Application No. 10/048695. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Although independent claims 18, 34 and 38 of the present application do not include some additional limitations set forth at the end of independent claim 10 of 10/048,695, it would have been obvious to one of ordinary skill in the art to exclude these additional features, as open-ended "comprising" language exists in the present application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 18-21, 24, 27, 32-33, 38 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner in view of Gamble and further in view of Augustine, III.

Gardner (col. 3, lines 4+) substantially teaches the claimed distributor device (rectangular or box-like receptacle 7 of material such as steel) having long walls, short walls and base member (bottom) for use in continuous casting aluminum by positioning the receptacle in a mold 1 and receiving molten aluminum from pouring spout 5 and distributing the molten aluminum

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into mold cavity of the mold 1 through the one or more horizontal elongated outlet opening (slots 13) on the lower parts of short walls of the receptacle 7.

Gardner fails to teach the use of a refractory material for coating the receptacle and a downwards inclined base member (bottom) towards the outlet opening (slots 13). However, Gamble (col. 2, lines 15+) teaches the use of the coating refractory material for the purpose of providing a coated receptacle with the property of non-wetting and easily cleaned after use in casting the molten aluminum. Augustine, III (col. 3, lines 59+) teaches the use of a downwards inclined base member (bottom) having a raised flow deflector (diffuser having a domed diverter 31) towards the outlet openings 23 or 25 for the purpose of guiding molten aluminum flow into the mold cavity and providing an easily cleaned bottom after use in casting the molten aluminum. It would have been obvious to one having ordinary skill in the art to provide Gardner the use of a refractory material for coating the receptacle and a downwards inclined base member (bottom) towards the outlet opening as taught by <sup>Gamble</sup>~~Hamano~~ in order to effectively reuse the receptacle and guide the molten aluminum flow into the mold cavity and providing an easily cleaned bottom after use in casting the molten aluminum

9. Claims 22-23, 25, 28-31, 34-37, 39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner in view of Gamble and further in view of Augustine, III and Tremblay.

Gardner in view of Gamble and further in view of Augustine, III fails to teach the use of receptacle having side walls separation or width increased towards ends of the side walls or/and the use of porous element.

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However, Tremblay (col. 4, lines 35+ and Fig. 9) teaches the use of a filtration and distribution device 41 having side walls separation or width increased towards ends of the side walls including the use of glass fiber coated porous element (screen 49) for the purpose of filtrating and guiding the molten aluminum flow into the mold cavity. It would have been obvious to one having ordinary skill in the art to provide Gardner in view of Gamble and further in view of Augustine, III the use of a receptacle having side walls separation or width increased towards ends of the side walls for accommodating a filtration and distribution device having side walls separation or width increased towards ends of the side walls as taught by Tremblay in order to effectively filtrate and guide the cleaned molten aluminum flow into the mold cavity.

10. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner in view of Gamble and further in view of Augustine, III and Bebbler et al.

Gardner in view of Gamble and further in view of Augustine, III fails to teach the use of heating means.

However, Bebbler et al (col. 3, lines 10+) teaches the use of heating means (plasma burners 14) for the purpose of effectively heating the distributor trough 10. It would have been obvious to one having ordinary skill in the art to provide Gardner in view of Gamble and further in view of Augustine, III the use of heating means as taught by Bebbler et al in order to effectively heat the receptacle (distributor trough).

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ing-Hour Lin whose telephone number is (571) 272-1180. The examiner can normally be reached on M-F (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*I. H. Lin*

I.-H. Lin

9-12-05

KEVIN KERNS *Kevin Kerns 9/15/05*  
PRIMARY EXAMINER